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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,103	07/14/2003	Junichi Ishizuka	F-7859	5800
28107 7590 12/10/2007 JORDAN AND HAMBURG LLP 122 EAST 42ND STREET SUITE 4000 NEW YORK, NY 10168			EXAMINER DEHGHAN, QUEENIE S	
			ART UNIT 1791	PAPER NUMBER
			MAIL DATE 12/10/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/619,103	ISHIZUKA, JUNICHI	
	Examiner	Art Unit	
	Queenie Dehghan	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-20 is/are pending in the application.
- 4a) Of the above claim(s) 3-4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 5-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 9, 10, 12, 15, 16, and 18-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
3. Claims 9 and 15 recite the outermost radius of the two cores are the same. The specification fails to offer support for this limitation. The drawings do not offer a plan view of the molding cores to confirm this limitation.
4. Claims 10 and 16 recite the length of the end part of the first molding core is greater than the thickness of the restrictor. The specification fails to offer support for this limitation. In fact, figure 4 depict a gap between the first molding core and the restrictor that appears to be less than the space between the end tip of the first molding core and second molding core that is filled by the glass preform, indicating that the length of the end tip of the first molding core is not greater than the thickness of the restrictor.
5. Claims 12 and 18-20 recite a restrictor for homogenizing an optical performance of lens elements disposed in a central area of the preform and lens elements disposed

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in a peripheral area of the preform. There appears to be a lack of support for this limitation in the specification.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 2, 5-7, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Budinski et al. (6,305,194) in view of Shimizu et al. (JP 60-171234). Budinski et al. disclose a method for molding lens by heating and compressing a lens preform between oppositely placed first and second cores (102, 104), each having an end part comprising a compression molding surface, wherein at least one of the molding surfaces comprises depressions formed on the surfaces for transferring and molding a plurality of convex or concave elements (Fig. 5 col. 1 lines 40-49), while under vacuum (col. 7 lines 4-6). However, Budinski et al. fail to teach of an intermediate restrictor and the positioning of the restrictor with respect to the molding cores. Shimizu et al. teach a first (2') and second (1') molding cores with end parts, an intermediate restrictor (3) comprising a predetermined outer radial dimension and an opening with a predetermined radius, wherein the outer radial dimension being greater than an outermost radial dimension of both the first and second cores, and the end part of the first molding core have a radially outer dimension that is smaller than the radius of the opening of the intermediate restrictor (drawings 3 & 4, abstract). Also, the end part of the second molding core has a radially outer dimension that is larger than the radius of

the opening of the intermediate restrictor and smaller than the outer radial dimensions of the intermediate restrictor, so that the intermediate member is positioned on a platform formed on the end part of a second molding core (1'), wherein an axis of the second molding core is collinear with an axis of the opening. Shimizu et al. also position the lens preform (10) and the end part of first molding core (2') in the opening of the intermediate restrictor, so that the end part opposes the end part of the second molding core and an axis of the first molding core is collinear with an axis of the opening (abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the intermediate restrictor arrangement of Shimizu et al. in the molding process of Budinski et al. in order to prevent the inclination of the molding die surfaces as taught by Shimizu et al.

2. Regarding claims 7 and 13, Shimizu et al. discloses an end part of the first molding core that has a smaller outer radius than the outermost radial dimension of the second molding core in figure 3. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize such an arrangement of the molding cores in process of Budinski et al. in order to offer support for the restrictor, as depicted in the embodiment presented by Shimizu et al.

3. Regarding claims 12 and 18-20, Budinski et al. disclose the molding of a lens preform to closely conform to each of the said depressions or projections and thereby homogenize an optical performance of all the lens elements of the lens preform, resulting in lens free from surface figure distortion (col. 4 line 62 to col. 5 line 15). As

already discussed above, Shimizu discloses a restrictor, which is clearly positioned to restrict a flow of the lens preform during heating and compressing of the lens preform.

4. Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Budinski et al. (6,305,194) in view of Shimizu et al. (JP 60-171234), as applied to claim 5 above, in further view of Takagi et al. (5,817,616). Budinski and Shimizu fail to specifically disclose a first molding core with an end part that has a radius smaller than the outermost radial dimension of the first molding core. Takagi teaches an optical element molding method that comprises a first and second molding core as well as a restrictor (figure 1). Furthermore, Takagi teaches a first molding core that has an end part with a radius that is smaller than the outermost radial dimension of the first molding core (flange 3c in figure 1). Having a flange section of the molding core allows for a contact surface between the molding core and the restrictor, and therefore forming a gap. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize such an embodiment of the first molding die of Takagi in the process of Budinski and Shimizu in order to provide a gap that determines the thickness of the optical element formed, as taught by Takagi.

5. Claims 9, 11, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Budinski et al. (6,305,194) in view of Shimizu et al. (JP 60-171234), as applied to claim 5 above, in further view of Ikeuchi et al. (JP 03-146427). Budinski and Shimizu fail to specifically disclose molding cores with the same outermost radial dimensions. Ikeuchi et al. teach a method for molding optical elements comprising a mold with a first (4) and second (3) molding cores, wherein the second molding core

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has a radial dimension that larger than the opening of the restrictor (5) so that a platform is for positioning the restrictor is formed and wherein the first molding core has end part (4c) that has a radius smaller than the opening of the restrictor. Furthermore, Ikeuchi teaches first and second molding cores with outermost radial dimensions that are same and a restrictor that is between the first and second molding cores (figure 1). Absent of any unexpected results from utilizing molding cores that have outermost radial dimensions that are the same and restrictors located between the molding cores, one of ordinary skill in the art at the time of the invention would reasonably employed molding cores and a restrictor with portions not directly involved with the molding of the optical surfaces of the optical element to have any desired shape to fit the overall apparatus employing the molding core, such as the molding cores of Ikeuchi with outermost radial dimensions that are the same and the restrictor between the cores. The above combination of familiar elements, such as a platform for the restrictor, a first molding core with a smaller radius than the opening of the restrictor, the same outermost radial dimension of the molding cores, and a restrictor located between the molding cores yields predictable results of producing the desired optical elements.

6. Claims 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Budinski et al. (6,305,194) in view of Shimizu et al. (JP 60-171234), as applied to claim 5 above, in further view of Hirota et al. (6,813,906). Shimizu discloses a first molding core with an end part having a length greater than the thickness of the restrictor. However, the first molding core of Shimizu does not have a portion adjacent to the end part that has a larger radial outer dimension. Hirota et al. teach of a method

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for producing optical elements comprising of a first (1) and second (2) molding core and a restrictor (8) that rests on a platform formed on the second molding core (figures 2A-2C). Furthermore, the length of the end part of the first molding core extends in a direction perpendicular to the radius of the opening of the restrictor, has a radially outer dimension that is smaller than a radially outer dimension of a portion adjacent the end part, and is greater than the thickness of the restrictor (figures 2A-2C, 3). Absent of any unexpected results from utilizing molding cores that have an end part with a length greater than the thickness of the restrictor or a molding core with an end part that has a radius that is smaller than a portion adjacent the molding core, one of ordinary skill in the art at the time of the invention would reasonably employed a molding core and a restrictor with portions not directly involved with the molding of the optical surfaces of the optical element to have any desired shape to fit the overall apparatus employing the molding core and restrictor, such as the molding cores of Hirota with an end part that is longer than the thickness of the restrictor and smaller in radius than an adjacent portion of the molding core. The above combination of familiar elements, such as a platform for the restrictor, a first molding core with an end part with a smaller radius than a portion adjacent the end part, and an end part of the first molding core that is longer than the thickness of the restrictor yields predictable results of producing the desired optical elements.

Response to Arguments

6. Applicant's arguments filed September 26, 2007 have been fully considered but they are not persuasive. The applicant argues that there is no reason to alter the shapes of the molding cores of Budinski, especially to be shaped like the molding core of Shimizu. The applicant alleges that the shape of the molding cores of Budinski is different from that of Shimizu. This appears to be mere allegation, since none of the figures (fig 5, 7 or 9) of the Budinski molding cores give a complete picture of how the molding cores are shaped. As presented in the previous rejection, Budinski was relied upon to teach a molding surface with depressions or projections. Shimizu was relied upon to teach a restrictor and the arrangement of the restrictor for them to work, that is the platform created on the second molding die to support them; hence making it obvious to modify the overall shapes and arrangements of the molding cores with multiple depressions of Budinski in order to accommodate the desired restrictor for prevention of the inclination of the molding die surfaces. Budinski was not used to teach an inclination problem, but instead Shimizu teaches an improvement for producing optical elements with high accuracy by using a restrictor. The applicant also argues that restrictor and sliding parts of Shimizu would interfere with the induction heating coil of Budinski. This appears to be mere allegation with no evidence. Furthermore, the heating coils of Budinski are not an element that is claimed or discussed in any of the rejections.

7. Regarding claims 7-18, the applicant argues claims that are new and obviously have not been rejected in the previous office action. The arguments are moot in view of

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the rejections presented above. However, the Examiner would like to point out that the restrictor of Shimizu does restrict the flow of glass as can be seen by the resulting glass elements formed in figures 5 and 6. The outside rim of the glass element has obviously been restricted and redirected to the "escape space", but nonetheless, restricted.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Queenie Dehghan whose telephone number is (571)272-8209. The examiner can normally be reached on Monday through Friday 8:30am - 5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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